

### **Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

#### Listing of Claims

1. (Currently Amended) A method for manufacturing an electronic module, comprising:

- taking a sheet, which has a first and a second surface, and which sheet includes an insulating-material layer between the first\_ and the second surface, as well as a conductive layer on at least the first surface,
- making at least one recess in the sheet that extends through the second surface and the insulating-material layer as far as the conductive layer on the first surface, which covers the recess from the direction of the first surface,
- taking a component having a contact surface with contact areas or contact protrusions,
- placing the component in the recess with its contact surface facing the first surface,
- attaching the component to the conductive layer, which covers the recess from the direction of the first surface, by gluing with the aid of an electrically insulating adhesive, and
- forming a conductive pattern from the conductive layer covering the recess and forming an electrical contact between the component and the conductive pattern by making feed-throughs, which connect at least some of the contact areas or contact protrusions of the component electrically to the conductive pattern.

2. (Currently Amended) A method according to Claim 1, further including at least one additional component, wherein the components are placed facing both the first and second surface in the insulating-material layer and electrical contacts are formed to the components in such a way that at least ~~some~~ one of the components ~~are~~ is connected to the conductive layer on the first surface and at least ~~some~~ one of the components is connected to the conductive layer on the second surface.

3. (Currently Amended) ~~A method according to Claim 1, comprising performing, after the component or several components have been attached to the conductive layer, which closes the recess or recesses from the direction of the first surface, the following steps:~~ A method for manufacturing an electronic module, comprising:

- taking a sheet, which has a first and a second surface, and which sheet includes an insulating-material layer between the first and the second surface, as well as a conductive layer on the first surface,

- making at least one recess in the sheet that extends through the second surface and the insulating-material layer as far as the conductive layer on the first surface, which covers the recess from the direction of the first surface,

- taking a first component having a contact surface with contact areas or contact protrusions,

- placing the first component in the recess with its contact surface facing the first surface,

- attaching the first component to the conductive layer on the first surface by gluing with the aid of an electrically insulating adhesive,

- forming a first conductive pattern from the conductive layer on the first surface and forming an electrical contact between the first component and the first conductive pattern by making feed-throughs, which connect at least some of the contact areas or contact protrusions of the first component electrically to the first conductive pattern,

- making a conductive layer on the second surface of the sheet,

- making at least one recess in the sheet, which extends through the first surface and the insulating-material layer as far as the conductive layer

on the second surface, which covers the recess from the direction of the second surface,

- taking a second component having a contact surface with contact areas or contact protrusions,

- placing the second component in the recess, with its contact surface towards the second surface, and attaching the second component to the conductive layer which covers the recess from the direction of the second surface by gluing with the aid of an electrically insulating adhesive, and

- forming a second conductive pattern from the conductive layer which covers the recess from the direction of the second surface ~~covering the recess and forming an electrical contact between the second component and the second conductive pattern by making feed-throughs, which connect pattern is connected electrically to~~ at least some of the contact areas or contact protrusions of the second component electrically to the second conductive pattern. ~~placed in the recess.~~

4. (Previously Presented) A method according to Claim 1, wherein said sheet is a sheet which is surfaced with a conductive layer on both surfaces, and the method comprises:

- manufacturing at least one second recess the at least one second recess extending through the first surface and the insulating-material layer as far as the conductive layer on the second surface, which covers the manufactured recess from the direction of the second surface,

- taking a component, which has a contact surface with contact areas or contact protrusions,

- placing the component in the recess with its contact surface facing the second surface and attaching the component to the conductive layer, which covers the recess from the direction of the second surface, and

- forming a conductive pattern from the conductive layer covering the recess, which pattern is electrically connected to at least some of the contact areas or contact protrusions of the component set in the recess.

5. (Previously Presented) A method according to Claim 1, wherein the thickness of the insulating-material layer is less than the thickness of at least one component attached to the conductive layer and in which the method comprises:

- taking at least one second insulating-material sheet,
- making in the second insulating-material sheet at least one recess for the said at least one component attached to the conductive layer, and
- attaching the second insulating-material sheet to the first insulating-material layer from the direction of the second surface.

6. (Previously Presented) A method according to Claim 1, wherein a first and a second element are manufactured, both of which include an insulating-material layer, a conductive layer on at least the first surface of the insulating-material layer, and at least one component in at least one recess, and in which method comprises:

- taking at least one second insulating-material sheet, and
- attaching the first and the second elements to each other with the aid of the said second insulating-material sheet, in such a way that the second surfaces of the insulating-material layers contained in the elements face towards each other.

7. (Previously Presented) A method according to Claim 5, wherein the first insulating-material layer is of a first insulating material and the second insulating-material sheet is of a second insulating material, which differs from the first insulating material.

8. (Cancelled).

9. (Cancelled).

10. (Previously Presented) A method according to Claim 1, wherein at least one component is attached, and electrical contact with the conductive layer is formed by bonding the contact areas metallurgically to the conductive layer, either directly, or through intermediary contact protrusions.

11. (Previously Presented) A method according to Claim 1, wherein at least one component attached to the conductive layer is an unpacked microcircuit chip.

12. (Previously Presented) A method according Claim 1, wherein, in order to create a multi-layer circuit-board structure, additional insulating layers and conductive layers are manufactured on the first and/or the second surface.

13. (Previously Presented) A method according to Claim 1, wherein the components are embedded in at least two sheets, which are subsequently attached on top of each other.

14. (Previously Presented) A method according to Claim 1, wherein a conductive-pattern layer is manufactured on both the first and the second surfaces of the insulating-material layer.

15. (Previously Presented) An electronic module, comprising:

- a sheet, which has a first and a second surface, and which sheet includes an insulating-material layer between the first and the second surface,

- a conductive pattern layer on at least the first surface of the sheet,

- at least one recess in the sheet that extends through the second surface and the insulating-material layer as far as the conductive pattern layer on the first surface of the sheet,

- a component having a contact surface with contact areas or contact protrusions, the component placed in the recess with the contact surface of the component facing the first surface,

an electrically insulating adhesive attaching the component to the conductive pattern layer on the first surface of the sheet, and

feed-throughs connecting at least some of the contact areas or contact protrusions of the component electrically to the conductive pattern layer on the first surface of the sheet.

16. (Currently Amended) ~~The electronic module of Claim 15, comprising~~ An electronic module, comprising:

a sheet, which has a first and a second surface, and which sheet includes an insulating-material layer between the first and the second surface,

a first conductive pattern layer on the first surface of the sheet,

at least one recess in the sheet that extends through the second surface and the insulating-material layer as far as the first conductive pattern layer,

a first component having a contact surface with contact areas or contact protrusions, the first component placed in the recess with the contact surface of the component facing the first surface,

a first electrically insulating adhesive attaching the first component to the first conductive pattern layer on the first surface of the sheet, and

first feed-throughs connecting at least some of the contact areas or contact protrusions of the first component electrically to the first conductive pattern layer on the first surface of the sheet,

a second conductive pattern layer on the second surface of the sheet,

a second component placed in the insulating-material layer and facing the second conductive pattern layer,

a second electrically insulating adhesive attaching the second component to the second conductive pattern layer on the second surface of the sheet, and

second feed-throughs connecting at least some of the contact areas or contact protrusions of electrical contacts connecting the second component electrically to the second conductive pattern layer on the second surface of the sheet.

17. (Previously Presented) The electronic module of Claim 15, wherein the feed-throughs are metal and form metallurgical bonds between the contact areas or contact protrusions of the component and the conductive pattern layer.

18. (Previously Presented) The electronic module of Claim 15, wherein the component is an unpacked microcircuit chip.

19. (Previously Presented) The electronic module of Claim 15, comprising a further insulating layer and a further conductive layer on the first surface of the sheet.